

IN THE CLAIMS

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) A multi-tier system for digital radio communication, comprising:

a first-tier base station comprising a first radio transceiver operating in accordance with a first communication protocol;

a wireless device comprising a second radio transceiver operating in accordance with a second communication protocol that is different from the first communication protocol;

a combination unit that is wirelessly connected to the first-tier base station and connected to the wireless device;

wherein the first communications protocol is employed for transmissions at a higher speed and has a longer range than the second communications protocol and wherein the first-tier base station communicates with the wireless device via the combination unit,

and wherein the first-tier base station communicates to the combination unit one or more discrete number of frequency channels that may be utilized by the combination unit to communicate with the wireless device.

5. (Previously Presented) The system as in claim 4, wherein the combination unit includes at least one of ports for communicating via infrared wireless transmission, facsimile transmission, and transmission using a modem.

6. (Previously Presented) The system as in claim 4, wherein the first-tier base station communicates to the combination unit a plurality of the one or more discrete number of frequency channels that may be employed by the combination unit.

7. (Previously Presented) A method for coordinating communication, comprising:
transmitting via a first communications protocol using a wireless medium, wherein the first communications protocol utilizes frequency hopping to transmit a message over a discrete number of frequency channels within a frequency band;
transmitting via a second communications protocol to communicate using a wireless medium, wherein the second communications protocol utilizes frequency hopping to transmit a message over a discrete number of frequency channels within the frequency band, wherein the second communications protocol operates at a lower power level than the first communications protocol;
coordinating between a device using the second communication protocol and a transmitting device transmitting via the first communication protocol to determine one or more discrete number of frequency channels that will not be used by the first communications protocol and transmitting via the second communications protocol using the one or more discrete number of frequency channels that are not used by the first communications protocol.

8. (Original) The method as in claim 7, wherein the frequency band is the 2.4 GHz ISM band.

9. (Previously Presented) The method as in claim 7, wherein the act of coordinating comprises determining a plurality of discrete number of frequency channels that will not be used by the first communications protocol and transmitting via the second communications protocol using the plurality of discrete number of frequency channels that are not used by the first communications protocol.

10. (Previously Presented) The method as in claim 7, wherein the second communications protocol operates at a power level of about 1 mW and wherein the first communications protocol operates at a power level of about 100 mW.

11. (Previously Presented) The method as in claim 7, wherein the coordinating is between an access point transmitting via the first communication protocol and a combination unit transmitting via the second communication protocol to a wireless device.

12. (Previously Presented) The method as in claim 7, wherein the one or more discrete number of frequency channels that are not being used by the first communications protocol are frequency channels on either end of the frequency band.

13. (Previously Presented) The method as in claim 7, wherein at least two of the one or more discrete number of frequency channels are not being used, and wherein the at least two frequency channels that are not being used by the first communications protocol are the two frequency channels on either end of the frequency band.

14. (Original) The method as in claim 7, wherein the first communication protocol is the IEEE 802.11 protocol.

15. (Previously Presented) A system for wireless communication, comprising:
a first-tier base station comprising a first radio transceiver operating in accordance with a first communication protocol;
a second-tier base station comprising a second radio transceiver operating in accordance with a second communication protocol independent of the first communication protocol;
a first-tier remote unit wirelessly connected to the first-tier base station through the first radio transceiver;
a second-tier remote unit wirelessly connected to the second-tier base station through the second radio transceiver;
wherein the first-tier remote unit connects to the first-tier base station via a first communications protocol using a wireless medium, wherein the first communications protocol utilizes frequency hopping to transmit a message over a discrete number of frequency channels within a frequency band;

wherein the second-tier remote unit connects to the second-tier base station via a second communications protocol using a wireless medium, wherein the second communications protocol utilizes frequency hopping to transmit a message over a discrete number of frequency channels within a frequency band, wherein the second communications protocol operates at a lower power level than the first communications protocol;

and wherein the first-tier base station and the second-tier base station coordinate to determine the one or more discrete number of frequency channels that will not be used by the first communications protocol and direct the second-tier base station to use only the one or more discrete number of frequency channels that are not used by the first-tier base station.

16. (Previously Presented) The system as in claim 15, wherein the frequency band is the 2.4 GHz ISM band and wherein the first communications protocol is the IEEE 802.11 protocol.

17. (Original) The system as in claim 15, wherein the first communications protocol operates at a power level of about 100 m W.

18. (Original) The system as in claim 15, wherein the second communications protocol operates at a power level of about 1 m W.

19. (Previously Presented) The system as in claim 15, wherein the one or more discrete number of frequency channels that are not being used by the first communications protocol are frequency channels on either end of the frequency band.

20. (Previously Presented) The system as in claim 15, wherein at least two of the one or more discrete number of frequency channels that are not being used, and wherein the at least two frequency channels that are not being used by the first communications protocol are the two frequency channels on either end of the frequency band.

21. (Original) The system as in claim 15, wherein the second communications protocol is used to communicate among at least two moving vehicles.

22. (Original) The system as in claim 15, wherein the second communications protocol is used to identify a vehicle using a database of vehicle information.

23. (Original) The system as in claim 15, wherein the second communications protocol is used to identify the identity and location of a missing vehicle.

24. (Original) The system as in claim 15, wherein the second communications protocol is used to obtain diagnostic information for a vehicle.

25. (Original) The system as in claim 15, wherein the second communications protocol is used among at least two vehicles to prevent collisions between the at least two vehicles.

26. (Previously Presented) The system as in claim 15, wherein the second communications protocol is used to transmit information associated with a weight of a vehicle.

27. (Original) The system as in claim 15, wherein the second communications protocol is used to transmit data about a fixed location to a vehicle.

28. (Original) The system as in claim 15, wherein the second communications protocol is used by a vehicle to control traffic control signals.

29. (Previously Presented) The system as in claim 15, wherein the second communications protocol is used to inform a prospective customer that a taxicab is available.

30. (Previously Presented) The system as in claim 15, wherein the second communications protocol is used to determine information associated with a toll.

31. (Cancelled).

32. (Previously Presented) The system as in claim 4, wherein the first communications protocol and the second communications protocol each utilizes frequency hopping to transmit data.

33. (Previously Presented) A method for coordinating communication, comprising:
transmitting via a first communications protocol using a wireless medium, wherein the first communications protocol utilizes frequency hopping to transmit a message over a discrete number of frequency channels within a frequency band;
transmitting via a second communications protocol to communicate using a wireless medium, wherein the second communications protocol utilizes frequency hopping to transmit a message over a discrete number of frequency channels within the frequency band, wherein the second communications protocol operates at a lower power level than the first communications protocol;
coordinating between a device using a second communications protocol and a transmitting device transmitting via the first communication protocol to determine a plurality of discrete number of frequency channels that will be used by the first communications protocol and transmitting via the second communications protocol using one or more discrete number of frequency channels other than those used by the first communications protocol.

34. (Previously Added) The method as in claim 33, wherein coordinating with the transmitting device comprises indicating from the transmitting device to the device using

the second communications protocol the one or more discrete number of frequency channels that may be employed.